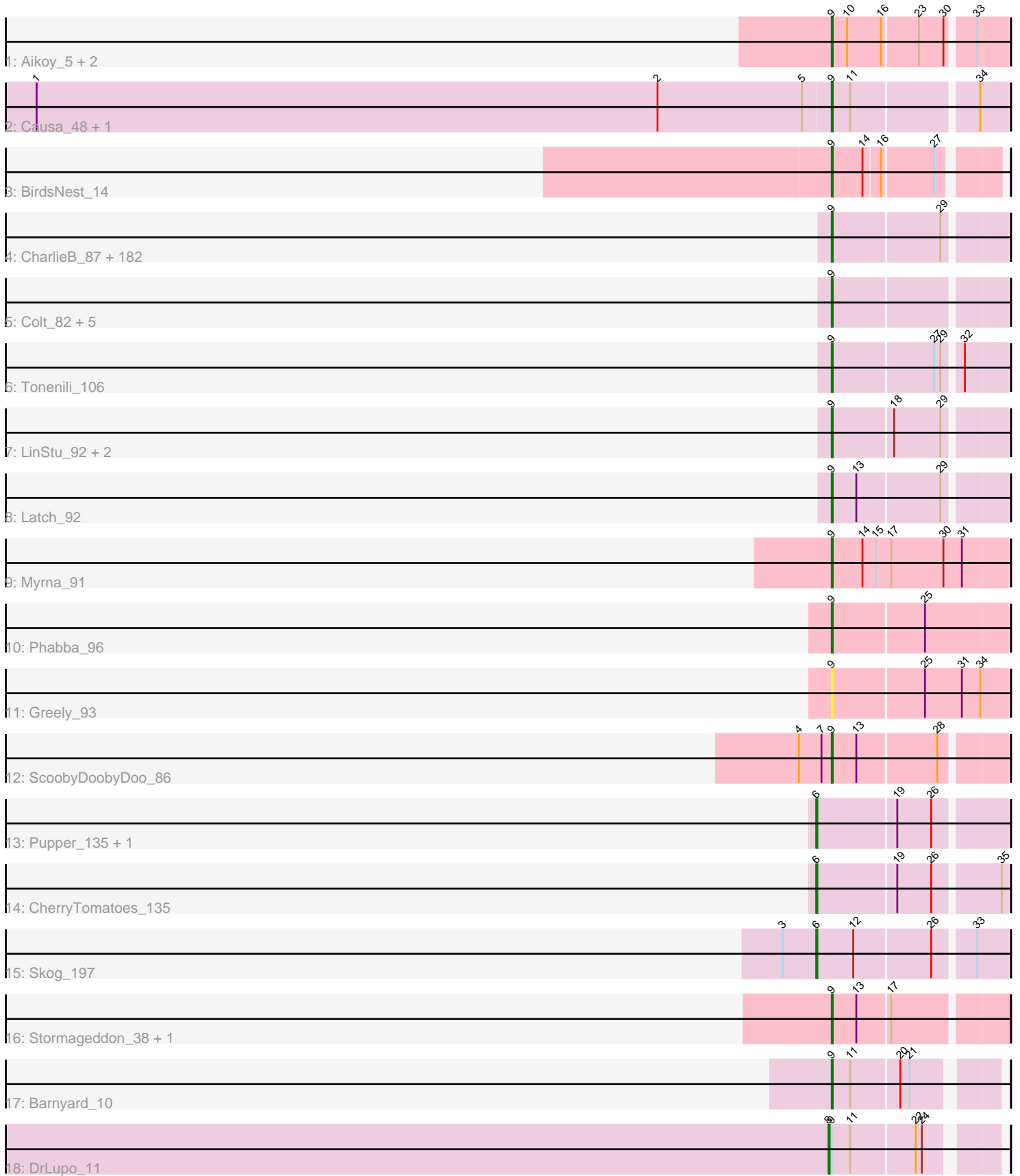


Pham 215831



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 215831 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215831 has 212 members, 27 are drafts.

Phages represented in each track:

- Track 1 : Aikoy_5, Leopard_6, Onyinye_6
- Track 2 : Causa_48, StAugustine_46
- Track 3 : BirdsNest_14
- Track 4 : CharlieB_87, SilverDipper_93, Lethe_92, Chargie21_88, Flabslab_87, Belieber_86, Shrimp_92, Ading_92, Grasshills_99, StubbySaigey_94, ChaylaJr_87, I3_98, Tyke_94, Khaleesi_91, ErnieJ_88, EggyFarm_100, FrayBell_98, PurduePete_92, Ngannou_88, Salacia_96, Iota_86, Gabriel_94, Bangla1971_93, Fludd_92, Lee7_90, Amataga_92, Rahel_91, MikeLiesIn_93, Nidhogg_93, JPickles_90, BeanWater_84, Guwapp_91, Rabinovish_89, BackyardAgain_89, NuevoMundo_98, Alice_85, Caravan_87, CindyLou_93, Halldule_85, Naija_91, Melpomini_86, Napoleon13_88, ScottMcG_89, Audrick_94, ParkTD_93, DTDevon_93, Ewok_93, Asterius_95, TinyTim_92, Phox_89, Fongie_90, Loanshark_92, Concombres_99, Zalkecks_93, IkeLoa_86, Bigswole_97, Primadonna_86, Jemmno_92, Blackdragon_86, Kamryn_92, LifeSavor_91, ValleyTerrace_92, Ablatia_88, Babyland_92, Jaygup_92, LRRHood_86, JulietS_85, Sauce_92, Ronan_85, LolaVinca_94, Pinkcreek_83, Issimir_91, Cali_87, Willis_93, NedWong_93, Naval22_97, BadAgartude_89, JigglyPuff_98, Nappy_94, Domi_86, EmToTheThree_95, DrPhinkDaddy_91, Pleione_95, Jedediah_95, ShiaLabeouf_92, Bipolarisk_91, Gizmo_96, Delylah_95, Derek_92, NoodleTree_100, ZygoTaiga_91, FoxtrotP1_92, Yucca_92, Pivoine_91, Basquiat_88, Dietrick_84, Quasimodo_92, Spud_92, Pier_96, Norm_93, SrishMeg2525_91, Mangeria_92, ArcherS7_91, Bonray_92, ET08_81, Phusco_92, Demodog_99, Izajani_92, Lukilu_83, Kboogie_95, Spec_87, Turret_87, Specks_98, InterFolia_101, Erdmann_93, SVoro_90, EmmaElysia_91, InigoMontoya_93, StephanieG_91, JustHall_88, Blackbrain_87, Stubby_85, JayJay_98, Tortoise16_90, Pio_96, McWolfish_90, Janiyra_94, Cactojaque_87, Trinitium_88, Darko_92, LordLeafolot_97, Gamgam_92, BananaFence_91, FudgeTart_92, Grungle_79, YemiJoy2021_93, EasyJones_95, Mikro_90, Megamind_91, SmallFry_92, Bread_92, Ava3_93, Zeenon_94, Patter_92, Delilah_92, Capablanca_94, BigCity_100, Koguma_88, QBert_86, Drazdys_92, Littleton_92, Shaqnato_84, Sprinklers_87, Shelob_94, Daffodil_97, Phlegm_94, Adlitam_92, Jessibeth14_91, GlutenPhree_90, Ghost_91, Burrough_92, Breeniome_92, Tainan_97, DirtMonster_85, Astraea_90, Morizzled23_92, Roots515_91, Atlantean_91, Teardrop_92, ChickenPhender_88, Matsumoto_90, Wally_91, Yassified_88, RoMag_87, Momo_91, Jezreel_90, McGee_93, Maby2021_92, YoungMoneyMata_92, Shnickers_92, MoMoMixon_93, Chomp_91, Essence_89
- Track 5 : Colt_82, Shifa_81, DeejaClivia_81, Blubba_81, HyRo_84, Cane17_81

- Track 6 : Tonenili_106
- Track 7 : LinStu_92, Dandelion_99, Sebata_93
- Track 8 : Latch_92
- Track 9 : Myrna_91
- Track 10 : Phabba_96
- Track 11 : Greely_93
- Track 12 : ScoobyDoobyDoo_86
- Track 13 : Pupper_135, SCentae_134
- Track 14 : CherryTomatoes_135
- Track 15 : Skog_197
- Track 16 : Stormageddon_38, RedWattleHog_41
- Track 17 : Barnyard_10
- Track 18 : DrLupo_11

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 9, it was called in 180 of the 185 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia_88, Ading_92, Adlitam_92, Aikoy_5, Alice_85, Amataga_92, ArcherS7_91, Asterius_95, Astraea_90, Atlantean_91, Audrick_94, Ava3_93, Babyland_92, BackyardAgain_89, BadAgartude_89, BananaFence_91, Bangla1971_93, Barnyard_10, Basquiat_88, BeanWater_84, Belieber_86, BigCity_100, Bigswole_97, Bipolarisk_91, BirdsNest_14, Blackbrain_87, Blackdragon_86, Blubba_81, Bonray_92, Bread_92, Breeniome_92, Burrough_92, Cactojaque_87, Cali_87, Cane17_81, Capablanca_94, Caravan_87, Causa_48, Chargie21_88, CharlieB_87, ChaylaJr_87, ChickenPhender_88, Chomp_91, CindyLou_93, Colt_82, Concombre_99, DTDevon_93, Daffodil_97, Dandelion_99, Darko_92, DeejaClivia_81, Delilah_92, Delylah_95, Demodog_99, Derek_92, Dietrick_84, DirtMonster_85, Domi_86, DrPhinkDaddy_91, Drazdys_92, ET08_81, EasyJones_95, EggFarm_100, EmToTheThree_95, EmmaElysia_91, Erdmann_93, ErnieJ_88, Essence_89, Ewok_93, Flabslab_87, Fludd_92, Fongie_90, FoxtrotP1_92, FrayBell_98, FudgeTart_92, Gabriel_94, Gamgam_92, Ghost_91, Gizmo_96, GlutenPhree_90, Grasshills_99, Greely_93, Grungle_79, Guwapp_91, Halldule_85, HyRo_84, I3_98, IkeLoa_86, InigoMontoya_93, InterFolia_101, Iota_86, Issimir_91, Izajani_92, JPickles_90, Janiyra_94, JayJay_98, Jaygup_92, Jedediah_95, Jemmno_92, Jessibeth14_91, Jezreel_90, JigglyPuff_98, JulietS_85, JustHall_88, Kamryn_92, Kboogie_95, Khaleesi_91, Koguma_88, LRRHood_86, Latch_92, Lee7_90, Leopard_6, Lethe_92, LifeSavor_91, LinStu_92, Littleton_92, Loanshark_92, LolaVinca_94, LordLeafolot_97, Lukilu_83, Maby2021_92, Mangeria_92, Matsumoto_90, McGee_93, McWolfish_90, Megamind_91, Melpomini_86, MikeLiesIn_93, Mikro_90, MoMoMixon_93, Momo_91, Morizzled23_92, Myrna_91, Naija_91, Napoleon13_88, Nappy_94, Naval22_97, NedWong_93, Ngannou_88, Nidhogg_93, NoodleTree_100, Norm_93, NuevoMundo_98, Onyinye_6, ParkTD_93, Patter_92, Phabba_96, Phlegm_94, Phox_89, Phusco_92, Pier_96, Pinkcreek_83, Pio_96, Pivoine_91, Pleione_95, Primadonna_86, PurduePete_92, QBert_86, Quasimodo_92, Rabinovish_89, Rahel_91, RedWattleHog_41, RoMag_87, Ronan_85, Roots515_91, SVoro_90, Salacia_96, Sauce_92, ScoobyDoobyDoo_86, ScottMcG_89, Sebata_93,

Shaqnato_84, Shelob_94, ShiaLabeouf_92, Shifa_81, Shnickers_92, Shrimp_92, SilverDipper_93, SmallFry_92, Spec_87, Specks_98, Sprinklers_87, Spud_92, SrishMeg2525_91, StAugustine_46, StephanieG_91, Stormageddon_38, StubbySaigey_94, Stubby_85, Tainan_97, Teardrop_92, TinyTim_92, Tonenili_106, Tortoise16_90, Trinitium_88, Turret_87, Tyke_94, ValleyTerrace_92, Wally_91, Willis_93, Yassified_88, YemiJoy2021_93, YoungMoneyMata_92, Yucca_92, Zalkecks_93, Zeenon_94, ZygoTaiga_91,

Genes that have the "Most Annotated" start but do not call it:

- DrLupo_11,

Genes that do not have the "Most Annotated" start:

- CherryTomatoes_135, Pupper_135, SCentae_134, Skog_197,

Summary by start number:

Start 6:

- Found in 4 of 212 (1.9%) of genes in pham
- Manual Annotations of this start: 4 of 185
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes_135 (DO), Pupper_135 (DO), SCentae_134 (DO), Skog_197 (DO),

Start 8:

- Found in 1 of 212 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 185
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DrLupo_11 (H2),

Start 9:

- Found in 208 of 212 (98.1%) of genes in pham
- Manual Annotations of this start: 180 of 185
- Called 99.5% of time when present
- Phage (with cluster) where this start called: Ablatia_88 (C1), Ading_92 (C1), Adlitam_92 (C1), Aikoy_5 (AE), Alice_85 (C1), Amataga_92 (C1), ArcherS7_91 (C1), Asterius_95 (C1), Astraea_90 (C1), Atlantean_91 (C1), Audrick_94 (C1), Ava3_93 (C1), Babyland_92 (C1), BackyardAgain_89 (C1), BadAgartude_89 (C1), BananaFence_91 (C1), Bangla1971_93 (C1), Barnyard_10 (H2), Basquiat_88 (C1), BeanWater_84 (C1), Belieber_86 (C1), BigCity_100 (C1), Bigswole_97 (C1), Bipolarisk_91 (C1), BirdsNest_14 (B13), Blackbrain_87 (C1), Blackdragon_86 (C1), Blubba_81 (C1), Bonray_92 (C1), Bread_92 (C1), Breeniome_92 (C1), Burrough_92 (C1), Cactojaque_87 (C1), Cali_87 (C1), Cane17_81 (C1), Capablanca_94 (C1), Caravan_87 (C1), Causa_48 (AI), Chargie21_88 (C1), CharlieB_87 (C1), ChaylaJr_87 (C1), ChickenPhender_88 (C1), Chomp_91 (C1), CindyLou_93 (C1), Colt_82 (C1), Concombre_99 (C1), DTDevon_93 (C1), Daffodil_97 (C1), Dandelion_99 (C1), Darko_92 (C1), DeejaClivia_81 (C1), Delilah_92 (C1), Delylah_95 (C1), Demodog_99 (C1), Derek_92 (C1), Dietrick_84 (C1), DirtMonster_85 (C1), Domi_86 (C1), DrPhinkDaddy_91 (C1), Drazdys_92 (C1), ET08_81 (C1), EasyJones_95 (C1), EggyFarm_100 (C1), EmToTheThree_95 (C1), EmmaElysia_91 (C1), Erdmann_93 (C1), ErnieJ_88 (C1), Essence_89 (C1), Ewok_93 (C1), Flabslab_87 (C1), Fludd_92 (C1), Fongie_90 (C1), FoxtrotP1_92 (C1), FrayBell_98 (C1), FudgeTart_92 (C1), Gabriel_94 (C1), Gamgam_92 (C1), Ghost_91 (C1), Gizmo_96 (C1), GlutenPhree_90 (C1), Grasshills_99 (C1), Greely_93 (C2),

Grungle_79 (C1), Guwapp_91 (C1), Halldule_85 (C1), HyRo_84 (C1), I3_98 (C1), IkeLoa_86 (C1), InigoMontoya_93 (C1), InterFolia_101 (C1), Iota_86 (C1), Issimir_91 (C1), Izajani_92 (C1), JPickles_90 (C1), Janiyra_94 (C1), JayJay_98 (C1), Jaygup_92 (C1), Jedediah_95 (C1), Jemmno_92 (C1), Jessibeth14_91 (C1), Jezreel_90 (C1), JigglyPuff_98 (C1), JulietS_85 (C1), JustHall_88 (C1), Kamryn_92 (C1), Kboogie_95 (C1), Khaleesi_91 (C1), Koguma_88 (C1), LRRHood_86 (C1), Latch_92 (C1), Lee7_90 (C1), Leopard_6 (AE), Lethe_92 (C1), LifeSavor_91 (C1), LinStu_92 (C1), Littleton_92 (C1), Loanshark_92 (C1), LolaVinca_94 (C1), LordLeafolot_97 (C1), Lukilu_83 (C1), Maby2021_92 (C1), Mangeria_92 (C1), Matsumoto_90 (C1), McGee_93 (C1), McWolfish_90 (C1), Megamind_91 (C1), Melpomini_86 (C1), MikeLiesIn_93 (C1), Mikro_90 (C1), MoMoMixon_93 (C1), Momo_91 (C1), Morizzled23_92 (C1), Myrna_91 (C2), Naija_91 (C1), Napoleon13_88 (C1), Nappy_94 (C1), Naval22_97 (C1), NedWong_93 (C1), Ngannou_88 (C1), Nidhogg_93 (C1), NoodleTree_100 (C1), Norm_93 (C1), NuevoMundo_98 (C1), Onyinye_6 (AE), ParkTD_93 (C1), Patter_92 (C1), Phabba_96 (C2), Phlegm_94 (C1), Phox_89 (C1), Phusco_92 (C1), Pier_96 (C1), Pinkcreek_83 (C1), Pio_96 (C1), Pivoine_91 (C1), Pleione_95 (C1), Primadonna_86 (C1), PurduePete_92 (C1), QBert_86 (C1), Quasimodo_92 (C1), Rabinovish_89 (C1), Rahel_91 (C1), RedWattleHog_41 (DX), RoMag_87 (C1), Ronan_85 (C1), Roots515_91 (C1), SVoro_90 (C1), Salacia_96 (C1), Sauce_92 (C1), ScoobyDoobyDoo_86 (C2), ScottMcG_89 (C1), Sebata_93 (C1), Shaqnato_84 (C1), Shelob_94 (C1), ShiaLabeouf_92 (C1), Shifa_81 (C1), Shnickers_92 (C1), Shrimp_92 (C1), SilverDipper_93 (C1), SmallFry_92 (C1), Spec_87 (C1), Specks_98 (C1), Sprinklers_87 (C1), Spud_92 (C1), SrishMeg2525_91 (C1), StAugustine_46 (AI), StephanieG_91 (C1), Stormageddon_38 (DX), StubbySaigey_94 (C1), Stubby_85 (C1), Tainan_97 (C1), Teardrop_92 (C1), TinyTim_92 (C1), Tonerili_106 (C1), Tortoise16_90 (C1), Trinitium_88 (C1), Turret_87 (C1), Tyke_94 (C1), ValleyTerrace_92 (C1), Wally_91 (C1), Willis_93 (C1), Yassified_88 (C1), YemiJoy2021_93 (C1), YoungMoneyMata_92 (C1), Yucca_92 (C1), Zalkecks_93 (C1), Zeenon_94 (C1), ZygoTaiga_91 (C1),

Summary by clusters:

There are 8 clusters represented in this pham: DO, AE, H2, AI, B13, DX, C2, C1,

Info for manual annotations of cluster AE:

- Start number 9 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster AI:

- Start number 9 was manually annotated 1 time for cluster AI.

Info for manual annotations of cluster B13:

- Start number 9 was manually annotated 1 time for cluster B13.

Info for manual annotations of cluster C1:

- Start number 9 was manually annotated 169 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 9 was manually annotated 3 times for cluster C2.

Info for manual annotations of cluster DO:

- Start number 6 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DX:

- Start number 9 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster H2:

- Start number 8 was manually annotated 1 time for cluster H2.
- Start number 9 was manually annotated 1 time for cluster H2.

Gene Information:

Gene: Ablatia_88 Start: 37880, Stop: 38035, Start Num: 9

Candidate Starts for Ablatia_88:

(Start: 9 @37880 has 180 MA's), (29, 37982),

Gene: Ading_92 Start: 39148, Stop: 39303, Start Num: 9

Candidate Starts for Ading_92:

(Start: 9 @39148 has 180 MA's), (29, 39250),

Gene: Adlitam_92 Start: 39165, Stop: 39320, Start Num: 9

Candidate Starts for Adlitam_92:

(Start: 9 @39165 has 180 MA's), (29, 39267),

Gene: Aikoy_5 Start: 2260, Stop: 2415, Start Num: 9

Candidate Starts for Aikoy_5:

(Start: 9 @2260 has 180 MA's), (10, 2275), (16, 2308), (23, 2341), (30, 2365), (33, 2389),

Gene: Alice_85 Start: 37028, Stop: 37183, Start Num: 9

Candidate Starts for Alice_85:

(Start: 9 @37028 has 180 MA's), (29, 37130),

Gene: Amataga_92 Start: 38410, Stop: 38565, Start Num: 9

Candidate Starts for Amataga_92:

(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: ArcherS7_91 Start: 38728, Stop: 38883, Start Num: 9

Candidate Starts for ArcherS7_91:

(Start: 9 @38728 has 180 MA's), (29, 38830),

Gene: Asterius_95 Start: 38713, Stop: 38868, Start Num: 9

Candidate Starts for Asterius_95:

(Start: 9 @38713 has 180 MA's), (29, 38815),

Gene: Astraea_90 Start: 38589, Stop: 38744, Start Num: 9

Candidate Starts for Astraea_90:

(Start: 9 @38589 has 180 MA's), (29, 38691),

Gene: Atlantean_91 Start: 38410, Stop: 38565, Start Num: 9

Candidate Starts for Atlantean_91:

(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: Audrick_94 Start: 38389, Stop: 38544, Start Num: 9

Candidate Starts for Audrick_94:

(Start: 9 @38389 has 180 MA's), (29, 38491),

Gene: Ava3_93 Start: 39086, Stop: 39241, Start Num: 9

Candidate Starts for Ava3_93:

(Start: 9 @39086 has 180 MA's), (29, 39188),

Gene: Babyland_92 Start: 37849, Stop: 38004, Start Num: 9

Candidate Starts for Babyland_92:

(Start: 9 @37849 has 180 MA's), (29, 37951),

Gene: BackyardAgain_89 Start: 37907, Stop: 38062, Start Num: 9

Candidate Starts for BackyardAgain_89:

(Start: 9 @37907 has 180 MA's), (29, 38009),

Gene: BadAgartude_89 Start: 39469, Stop: 39624, Start Num: 9

Candidate Starts for BadAgartude_89:

(Start: 9 @39469 has 180 MA's), (29, 39571),

Gene: BananaFence_91 Start: 38951, Stop: 39106, Start Num: 9

Candidate Starts for BananaFence_91:

(Start: 9 @38951 has 180 MA's), (29, 39053),

Gene: Bangla1971_93 Start: 38858, Stop: 39013, Start Num: 9

Candidate Starts for Bangla1971_93:

(Start: 9 @38858 has 180 MA's), (29, 38960),

Gene: Barnyard_10 Start: 6469, Stop: 6612, Start Num: 9

Candidate Starts for Barnyard_10:

(Start: 9 @6469 has 180 MA's), (11, 6487), (20, 6532), (21, 6541),

Gene: Basquiat_88 Start: 37404, Stop: 37559, Start Num: 9

Candidate Starts for Basquiat_88:

(Start: 9 @37404 has 180 MA's), (29, 37506),

Gene: BeanWater_84 Start: 38802, Stop: 38957, Start Num: 9

Candidate Starts for BeanWater_84:

(Start: 9 @38802 has 180 MA's), (29, 38904),

Gene: Belieber_86 Start: 37762, Stop: 37917, Start Num: 9

Candidate Starts for Belieber_86:

(Start: 9 @37762 has 180 MA's), (29, 37864),

Gene: BigCity_100 Start: 41462, Stop: 41617, Start Num: 9

Candidate Starts for BigCity_100:

(Start: 9 @41462 has 180 MA's), (29, 41564),

Gene: Bigswole_97 Start: 41810, Stop: 41965, Start Num: 9

Candidate Starts for Bigswole_97:

(Start: 9 @41810 has 180 MA's), (29, 41912),

Gene: Bipolarisk_91 Start: 39116, Stop: 39271, Start Num: 9

Candidate Starts for Bipolarisk_91:

(Start: 9 @39116 has 180 MA's), (29, 39218),

Gene: BirdsNest_14 Start: 9597, Stop: 9740, Start Num: 9
Candidate Starts for BirdsNest_14:
(Start: 9 @9597 has 180 MA's), (14, 9627), (16, 9642), (27, 9690),

Gene: Blackbrain_87 Start: 37221, Stop: 37376, Start Num: 9
Candidate Starts for Blackbrain_87:
(Start: 9 @37221 has 180 MA's), (29, 37323),

Gene: Blackdragon_86 Start: 37934, Stop: 38089, Start Num: 9
Candidate Starts for Blackdragon_86:
(Start: 9 @37934 has 180 MA's), (29, 38036),

Gene: Blubba_81 Start: 37002, Stop: 37157, Start Num: 9
Candidate Starts for Blubba_81:
(Start: 9 @37002 has 180 MA's),

Gene: Bonray_92 Start: 39513, Stop: 39668, Start Num: 9
Candidate Starts for Bonray_92:
(Start: 9 @39513 has 180 MA's), (29, 39615),

Gene: Bread_92 Start: 39008, Stop: 39163, Start Num: 9
Candidate Starts for Bread_92:
(Start: 9 @39008 has 180 MA's), (29, 39110),

Gene: Breeniome_92 Start: 38231, Stop: 38386, Start Num: 9
Candidate Starts for Breeniome_92:
(Start: 9 @38231 has 180 MA's), (29, 38333),

Gene: Burrough_92 Start: 39665, Stop: 39820, Start Num: 9
Candidate Starts for Burrough_92:
(Start: 9 @39665 has 180 MA's), (29, 39767),

Gene: Cactojaque_87 Start: 37328, Stop: 37483, Start Num: 9
Candidate Starts for Cactojaque_87:
(Start: 9 @37328 has 180 MA's), (29, 37430),

Gene: Cali_87 Start: 39242, Stop: 39397, Start Num: 9
Candidate Starts for Cali_87:
(Start: 9 @39242 has 180 MA's), (29, 39344),

Gene: Cane17_81 Start: 37075, Stop: 37230, Start Num: 9
Candidate Starts for Cane17_81:
(Start: 9 @37075 has 180 MA's),

Gene: Capablanca_94 Start: 39535, Stop: 39690, Start Num: 9
Candidate Starts for Capablanca_94:
(Start: 9 @39535 has 180 MA's), (29, 39637),

Gene: Caravan_87 Start: 39039, Stop: 39194, Start Num: 9
Candidate Starts for Caravan_87:
(Start: 9 @39039 has 180 MA's), (29, 39141),

Gene: Causa_48 Start: 43096, Stop: 43251, Start Num: 9
Candidate Starts for Causa_48:
(1, 42322), (2, 42928), (5, 43069), (Start: 9 @43096 has 180 MA's), (11, 43114), (34, 43228),

Gene: Chargie21_88 Start: 37404, Stop: 37559, Start Num: 9
Candidate Starts for Chargie21_88:
(Start: 9 @37404 has 180 MA's), (29, 37506),

Gene: CharlieB_87 Start: 37240, Stop: 37395, Start Num: 9
Candidate Starts for CharlieB_87:
(Start: 9 @37240 has 180 MA's), (29, 37342),

Gene: ChaylaJr_87 Start: 37119, Stop: 37274, Start Num: 9
Candidate Starts for ChaylaJr_87:
(Start: 9 @37119 has 180 MA's), (29, 37221),

Gene: CherryTomatoes_135 Start: 94647, Stop: 94820, Start Num: 6
Candidate Starts for CherryTomatoes_135:
(Start: 6 @94647 has 4 MA's), (19, 94722), (26, 94755), (35, 94815),

Gene: ChickenPhender_88 Start: 37452, Stop: 37607, Start Num: 9
Candidate Starts for ChickenPhender_88:
(Start: 9 @37452 has 180 MA's), (29, 37554),

Gene: Chomp_91 Start: 39698, Stop: 39853, Start Num: 9
Candidate Starts for Chomp_91:
(Start: 9 @39698 has 180 MA's), (29, 39800),

Gene: CindyLou_93 Start: 39739, Stop: 39894, Start Num: 9
Candidate Starts for CindyLou_93:
(Start: 9 @39739 has 180 MA's), (29, 39841),

Gene: Colt_82 Start: 37671, Stop: 37826, Start Num: 9
Candidate Starts for Colt_82:
(Start: 9 @37671 has 180 MA's),

Gene: Concombre_99 Start: 41651, Stop: 41806, Start Num: 9
Candidate Starts for Concombre_99:
(Start: 9 @41651 has 180 MA's), (29, 41753),

Gene: DTDevon_93 Start: 39571, Stop: 39726, Start Num: 9
Candidate Starts for DTDevon_93:
(Start: 9 @39571 has 180 MA's), (29, 39673),

Gene: Daffodil_97 Start: 39404, Stop: 39559, Start Num: 9
Candidate Starts for Daffodil_97:
(Start: 9 @39404 has 180 MA's), (29, 39506),

Gene: Dandelion_99 Start: 42101, Stop: 42256, Start Num: 9
Candidate Starts for Dandelion_99:
(Start: 9 @42101 has 180 MA's), (18, 42158), (29, 42203),

Gene: Darko_92 Start: 39339, Stop: 39494, Start Num: 9

Candidate Starts for Darko_92:
(Start: 9 @39339 has 180 MA's), (29, 39441),

Gene: DeejaClivia_81 Start: 35256, Stop: 35411, Start Num: 9
Candidate Starts for DeejaClivia_81:
(Start: 9 @35256 has 180 MA's),

Gene: Delilah_92 Start: 39405, Stop: 39560, Start Num: 9
Candidate Starts for Delilah_92:
(Start: 9 @39405 has 180 MA's), (29, 39507),

Gene: Delylah_95 Start: 39198, Stop: 39353, Start Num: 9
Candidate Starts for Delylah_95:
(Start: 9 @39198 has 180 MA's), (29, 39300),

Gene: Demodog_99 Start: 41651, Stop: 41806, Start Num: 9
Candidate Starts for Demodog_99:
(Start: 9 @41651 has 180 MA's), (29, 41753),

Gene: Derek_92 Start: 39500, Stop: 39655, Start Num: 9
Candidate Starts for Derek_92:
(Start: 9 @39500 has 180 MA's), (29, 39602),

Gene: Dietrick_84 Start: 37155, Stop: 37310, Start Num: 9
Candidate Starts for Dietrick_84:
(Start: 9 @37155 has 180 MA's), (29, 37257),

Gene: DirtMonster_85 Start: 37997, Stop: 38152, Start Num: 9
Candidate Starts for DirtMonster_85:
(Start: 9 @37997 has 180 MA's), (29, 38099),

Gene: Domi_86 Start: 38733, Stop: 38888, Start Num: 9
Candidate Starts for Domi_86:
(Start: 9 @38733 has 180 MA's), (29, 38835),

Gene: DrLupo_11 Start: 6407, Stop: 6553, Start Num: 8
Candidate Starts for DrLupo_11:
(Start: 8 @6407 has 1 MA's), (Start: 9 @6410 has 180 MA's), (11, 6428), (22, 6488), (24, 6494),

Gene: DrPhinkDaddy_91 Start: 39460, Stop: 39615, Start Num: 9
Candidate Starts for DrPhinkDaddy_91:
(Start: 9 @39460 has 180 MA's), (29, 39562),

Gene: Drazdys_92 Start: 39202, Stop: 39357, Start Num: 9
Candidate Starts for Drazdys_92:
(Start: 9 @39202 has 180 MA's), (29, 39304),

Gene: ET08_81 Start: 38176, Stop: 38331, Start Num: 9
Candidate Starts for ET08_81:
(Start: 9 @38176 has 180 MA's), (29, 38278),

Gene: EasyJones_95 Start: 38511, Stop: 38666, Start Num: 9
Candidate Starts for EasyJones_95:

(Start: 9 @38511 has 180 MA's), (29, 38613),

Gene: EggyFarm_100 Start: 41462, Stop: 41617, Start Num: 9

Candidate Starts for EggyFarm_100:

(Start: 9 @41462 has 180 MA's), (29, 41564),

Gene: EmToTheThree_95 Start: 40856, Stop: 41011, Start Num: 9

Candidate Starts for EmToTheThree_95:

(Start: 9 @40856 has 180 MA's), (29, 40958),

Gene: EmmaElysia_91 Start: 37977, Stop: 38132, Start Num: 9

Candidate Starts for EmmaElysia_91:

(Start: 9 @37977 has 180 MA's), (29, 38079),

Gene: Erdmann_93 Start: 39405, Stop: 39560, Start Num: 9

Candidate Starts for Erdmann_93:

(Start: 9 @39405 has 180 MA's), (29, 39507),

Gene: ErnieJ_88 Start: 37433, Stop: 37588, Start Num: 9

Candidate Starts for ErnieJ_88:

(Start: 9 @37433 has 180 MA's), (29, 37535),

Gene: Essence_89 Start: 38964, Stop: 39119, Start Num: 9

Candidate Starts for Essence_89:

(Start: 9 @38964 has 180 MA's), (29, 39066),

Gene: Ewok_93 Start: 39032, Stop: 39187, Start Num: 9

Candidate Starts for Ewok_93:

(Start: 9 @39032 has 180 MA's), (29, 39134),

Gene: Flabslab_87 Start: 37189, Stop: 37344, Start Num: 9

Candidate Starts for Flabslab_87:

(Start: 9 @37189 has 180 MA's), (29, 37291),

Gene: Fludd_92 Start: 37851, Stop: 38006, Start Num: 9

Candidate Starts for Fludd_92:

(Start: 9 @37851 has 180 MA's), (29, 37953),

Gene: Fongie_90 Start: 39245, Stop: 39400, Start Num: 9

Candidate Starts for Fongie_90:

(Start: 9 @39245 has 180 MA's), (29, 39347),

Gene: FoxtrotP1_92 Start: 39804, Stop: 39959, Start Num: 9

Candidate Starts for FoxtrotP1_92:

(Start: 9 @39804 has 180 MA's), (29, 39906),

Gene: FrayBell_98 Start: 40854, Stop: 41009, Start Num: 9

Candidate Starts for FrayBell_98:

(Start: 9 @40854 has 180 MA's), (29, 40956),

Gene: FudgeTart_92 Start: 38598, Stop: 38753, Start Num: 9

Candidate Starts for FudgeTart_92:

(Start: 9 @38598 has 180 MA's), (29, 38700),

Gene: Gabriel_94 Start: 38640, Stop: 38795, Start Num: 9
Candidate Starts for Gabriel_94:
(Start: 9 @38640 has 180 MA's), (29, 38742),

Gene: Gamgam_92 Start: 38410, Stop: 38565, Start Num: 9
Candidate Starts for Gamgam_92:
(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: Ghost_91 Start: 38410, Stop: 38565, Start Num: 9
Candidate Starts for Ghost_91:
(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: Gizmo_96 Start: 39781, Stop: 39936, Start Num: 9
Candidate Starts for Gizmo_96:
(Start: 9 @39781 has 180 MA's), (29, 39883),

Gene: GlutenPhree_90 Start: 38410, Stop: 38565, Start Num: 9
Candidate Starts for GlutenPhree_90:
(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: Grasshills_99 Start: 41462, Stop: 41617, Start Num: 9
Candidate Starts for Grasshills_99:
(Start: 9 @41462 has 180 MA's), (29, 41564),

Gene: Greely_93 Start: 40118, Stop: 40282, Start Num: 9
Candidate Starts for Greely_93:
(Start: 9 @40118 has 180 MA's), (25, 40205), (31, 40241), (34, 40259),

Gene: Grungle_79 Start: 35792, Stop: 35947, Start Num: 9
Candidate Starts for Grungle_79:
(Start: 9 @35792 has 180 MA's), (29, 35894),

Gene: Guwapp_91 Start: 38505, Stop: 38660, Start Num: 9
Candidate Starts for Guwapp_91:
(Start: 9 @38505 has 180 MA's), (29, 38607),

Gene: Halldule_85 Start: 36822, Stop: 36977, Start Num: 9
Candidate Starts for Halldule_85:
(Start: 9 @36822 has 180 MA's), (29, 36924),

Gene: HyRo_84 Start: 37580, Stop: 37735, Start Num: 9
Candidate Starts for HyRo_84:
(Start: 9 @37580 has 180 MA's),

Gene: I3_98 Start: 39372, Stop: 39527, Start Num: 9
Candidate Starts for I3_98:
(Start: 9 @39372 has 180 MA's), (29, 39474),

Gene: IkeLoa_86 Start: 37770, Stop: 37925, Start Num: 9
Candidate Starts for IkeLoa_86:
(Start: 9 @37770 has 180 MA's), (29, 37872),

Gene: InigoMontoya_93 Start: 38371, Stop: 38526, Start Num: 9
Candidate Starts for InigoMontoya_93:
(Start: 9 @38371 has 180 MA's), (29, 38473),

Gene: InterFolia_101 Start: 41792, Stop: 41947, Start Num: 9
Candidate Starts for InterFolia_101:
(Start: 9 @41792 has 180 MA's), (29, 41894),

Gene: Iota_86 Start: 38151, Stop: 38306, Start Num: 9
Candidate Starts for Iota_86:
(Start: 9 @38151 has 180 MA's), (29, 38253),

Gene: Issimir_91 Start: 39348, Stop: 39503, Start Num: 9
Candidate Starts for Issimir_91:
(Start: 9 @39348 has 180 MA's), (29, 39450),

Gene: Izajani_92 Start: 39421, Stop: 39576, Start Num: 9
Candidate Starts for Izajani_92:
(Start: 9 @39421 has 180 MA's), (29, 39523),

Gene: JPickles_90 Start: 37641, Stop: 37796, Start Num: 9
Candidate Starts for JPickles_90:
(Start: 9 @37641 has 180 MA's), (29, 37743),

Gene: Janiyra_94 Start: 38681, Stop: 38836, Start Num: 9
Candidate Starts for Janiyra_94:
(Start: 9 @38681 has 180 MA's), (29, 38783),

Gene: JayJay_98 Start: 40709, Stop: 40864, Start Num: 9
Candidate Starts for JayJay_98:
(Start: 9 @40709 has 180 MA's), (29, 40811),

Gene: Jaygup_92 Start: 39166, Stop: 39321, Start Num: 9
Candidate Starts for Jaygup_92:
(Start: 9 @39166 has 180 MA's), (29, 39268),

Gene: Jedediah_95 Start: 39666, Stop: 39821, Start Num: 9
Candidate Starts for Jedediah_95:
(Start: 9 @39666 has 180 MA's), (29, 39768),

Gene: Jemmno_92 Start: 39116, Stop: 39271, Start Num: 9
Candidate Starts for Jemmno_92:
(Start: 9 @39116 has 180 MA's), (29, 39218),

Gene: Jessibeth14_91 Start: 39190, Stop: 39345, Start Num: 9
Candidate Starts for Jessibeth14_91:
(Start: 9 @39190 has 180 MA's), (29, 39292),

Gene: Jezreel_90 Start: 39104, Stop: 39259, Start Num: 9
Candidate Starts for Jezreel_90:
(Start: 9 @39104 has 180 MA's), (29, 39206),

Gene: JigglyPuff_98 Start: 40965, Stop: 41120, Start Num: 9

Candidate Starts for JigglyPuff_98:
(Start: 9 @40965 has 180 MA's), (29, 41067),

Gene: JulietS_85 Start: 36673, Stop: 36828, Start Num: 9
Candidate Starts for JulietS_85:
(Start: 9 @36673 has 180 MA's), (29, 36775),

Gene: JustHall_88 Start: 38319, Stop: 38474, Start Num: 9
Candidate Starts for JustHall_88:
(Start: 9 @38319 has 180 MA's), (29, 38421),

Gene: Kamryn_92 Start: 39929, Stop: 40084, Start Num: 9
Candidate Starts for Kamryn_92:
(Start: 9 @39929 has 180 MA's), (29, 40031),

Gene: Kboogie_95 Start: 37963, Stop: 38118, Start Num: 9
Candidate Starts for Kboogie_95:
(Start: 9 @37963 has 180 MA's), (29, 38065),

Gene: Khaleesi_91 Start: 39152, Stop: 39307, Start Num: 9
Candidate Starts for Khaleesi_91:
(Start: 9 @39152 has 180 MA's), (29, 39254),

Gene: Koguma_88 Start: 36893, Stop: 37048, Start Num: 9
Candidate Starts for Koguma_88:
(Start: 9 @36893 has 180 MA's), (29, 36995),

Gene: LRRHood_86 Start: 38712, Stop: 38867, Start Num: 9
Candidate Starts for LRRHood_86:
(Start: 9 @38712 has 180 MA's), (29, 38814),

Gene: Latch_92 Start: 38410, Stop: 38565, Start Num: 9
Candidate Starts for Latch_92:
(Start: 9 @38410 has 180 MA's), (13, 38434), (29, 38512),

Gene: Lee7_90 Start: 39015, Stop: 39170, Start Num: 9
Candidate Starts for Lee7_90:
(Start: 9 @39015 has 180 MA's), (29, 39117),

Gene: Leopard_6 Start: 2486, Stop: 2641, Start Num: 9
Candidate Starts for Leopard_6:
(Start: 9 @2486 has 180 MA's), (10, 2501), (16, 2534), (23, 2567), (30, 2591), (33, 2615),

Gene: Lethe_92 Start: 39600, Stop: 39755, Start Num: 9
Candidate Starts for Lethe_92:
(Start: 9 @39600 has 180 MA's), (29, 39702),

Gene: LifeSavor_91 Start: 38931, Stop: 39086, Start Num: 9
Candidate Starts for LifeSavor_91:
(Start: 9 @38931 has 180 MA's), (29, 39033),

Gene: LinStu_92 Start: 39776, Stop: 39931, Start Num: 9
Candidate Starts for LinStu_92:

(Start: 9 @39776 has 180 MA's), (18, 39833), (29, 39878),

Gene: Littleton_92 Start: 38365, Stop: 38520, Start Num: 9
Candidate Starts for Littleton_92:
(Start: 9 @38365 has 180 MA's), (29, 38467),

Gene: Loanshark_92 Start: 39405, Stop: 39560, Start Num: 9
Candidate Starts for Loanshark_92:
(Start: 9 @39405 has 180 MA's), (29, 39507),

Gene: LolaVinca_94 Start: 40511, Stop: 40666, Start Num: 9
Candidate Starts for LolaVinca_94:
(Start: 9 @40511 has 180 MA's), (29, 40613),

Gene: LordLeafolot_97 Start: 41502, Stop: 41657, Start Num: 9
Candidate Starts for LordLeafolot_97:
(Start: 9 @41502 has 180 MA's), (29, 41604),

Gene: Lukilu_83 Start: 38245, Stop: 38400, Start Num: 9
Candidate Starts for Lukilu_83:
(Start: 9 @38245 has 180 MA's), (29, 38347),

Gene: Maby2021_92 Start: 39086, Stop: 39241, Start Num: 9
Candidate Starts for Maby2021_92:
(Start: 9 @39086 has 180 MA's), (29, 39188),

Gene: Mangeria_92 Start: 39367, Stop: 39522, Start Num: 9
Candidate Starts for Mangeria_92:
(Start: 9 @39367 has 180 MA's), (29, 39469),

Gene: Matsumoto_90 Start: 39130, Stop: 39285, Start Num: 9
Candidate Starts for Matsumoto_90:
(Start: 9 @39130 has 180 MA's), (29, 39232),

Gene: McGee_93 Start: 37594, Stop: 37749, Start Num: 9
Candidate Starts for McGee_93:
(Start: 9 @37594 has 180 MA's), (29, 37696),

Gene: McWolfish_90 Start: 38812, Stop: 38967, Start Num: 9
Candidate Starts for McWolfish_90:
(Start: 9 @38812 has 180 MA's), (29, 38914),

Gene: Megamind_91 Start: 39071, Stop: 39226, Start Num: 9
Candidate Starts for Megamind_91:
(Start: 9 @39071 has 180 MA's), (29, 39173),

Gene: Melpomini_86 Start: 36596, Stop: 36751, Start Num: 9
Candidate Starts for Melpomini_86:
(Start: 9 @36596 has 180 MA's), (29, 36698),

Gene: MikeLiesIn_93 Start: 39418, Stop: 39573, Start Num: 9
Candidate Starts for MikeLiesIn_93:
(Start: 9 @39418 has 180 MA's), (29, 39520),

Gene: Mikro_90 Start: 40329, Stop: 40484, Start Num: 9
Candidate Starts for Mikro_90:
(Start: 9 @40329 has 180 MA's), (29, 40431),

Gene: MoMoMixon_93 Start: 39143, Stop: 39298, Start Num: 9
Candidate Starts for MoMoMixon_93:
(Start: 9 @39143 has 180 MA's), (29, 39245),

Gene: Momo_91 Start: 38410, Stop: 38565, Start Num: 9
Candidate Starts for Momo_91:
(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: Morizzled23_92 Start: 38116, Stop: 38271, Start Num: 9
Candidate Starts for Morizzled23_92:
(Start: 9 @38116 has 180 MA's), (29, 38218),

Gene: Myrna_91 Start: 40892, Stop: 41059, Start Num: 9
Candidate Starts for Myrna_91:
(Start: 9 @40892 has 180 MA's), (14, 40922), (15, 40934), (17, 40949), (30, 41000), (31, 41018),

Gene: Naija_91 Start: 38410, Stop: 38565, Start Num: 9
Candidate Starts for Naija_91:
(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: Napoleon13_88 Start: 37213, Stop: 37368, Start Num: 9
Candidate Starts for Napoleon13_88:
(Start: 9 @37213 has 180 MA's), (29, 37315),

Gene: Nappy_94 Start: 39969, Stop: 40124, Start Num: 9
Candidate Starts for Nappy_94:
(Start: 9 @39969 has 180 MA's), (29, 40071),

Gene: Naval22_97 Start: 41009, Stop: 41164, Start Num: 9
Candidate Starts for Naval22_97:
(Start: 9 @41009 has 180 MA's), (29, 41111),

Gene: NedWong_93 Start: 39405, Stop: 39560, Start Num: 9
Candidate Starts for NedWong_93:
(Start: 9 @39405 has 180 MA's), (29, 39507),

Gene: Ngannou_88 Start: 37392, Stop: 37547, Start Num: 9
Candidate Starts for Ngannou_88:
(Start: 9 @37392 has 180 MA's), (29, 37494),

Gene: Nidhogg_93 Start: 39259, Stop: 39414, Start Num: 9
Candidate Starts for Nidhogg_93:
(Start: 9 @39259 has 180 MA's), (29, 39361),

Gene: NoodleTree_100 Start: 40436, Stop: 40591, Start Num: 9
Candidate Starts for NoodleTree_100:
(Start: 9 @40436 has 180 MA's), (29, 40538),

Gene: Norm_93 Start: 39407, Stop: 39562, Start Num: 9
Candidate Starts for Norm_93:
(Start: 9 @39407 has 180 MA's), (29, 39509),

Gene: NuevoMundo_98 Start: 41366, Stop: 41521, Start Num: 9
Candidate Starts for NuevoMundo_98:
(Start: 9 @41366 has 180 MA's), (29, 41468),

Gene: Onyinye_6 Start: 2474, Stop: 2629, Start Num: 9
Candidate Starts for Onyinye_6:
(Start: 9 @2474 has 180 MA's), (10, 2489), (16, 2522), (23, 2555), (30, 2579), (33, 2603),

Gene: ParkTD_93 Start: 39401, Stop: 39556, Start Num: 9
Candidate Starts for ParkTD_93:
(Start: 9 @39401 has 180 MA's), (29, 39503),

Gene: Patter_92 Start: 38427, Stop: 38582, Start Num: 9
Candidate Starts for Patter_92:
(Start: 9 @38427 has 180 MA's), (29, 38529),

Gene: Phabba_96 Start: 39961, Stop: 40125, Start Num: 9
Candidate Starts for Phabba_96:
(Start: 9 @39961 has 180 MA's), (25, 40048),

Gene: Phlegm_94 Start: 38410, Stop: 38565, Start Num: 9
Candidate Starts for Phlegm_94:
(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: Phox_89 Start: 39274, Stop: 39429, Start Num: 9
Candidate Starts for Phox_89:
(Start: 9 @39274 has 180 MA's), (29, 39376),

Gene: Phusco_92 Start: 39175, Stop: 39330, Start Num: 9
Candidate Starts for Phusco_92:
(Start: 9 @39175 has 180 MA's), (29, 39277),

Gene: Pier_96 Start: 40406, Stop: 40561, Start Num: 9
Candidate Starts for Pier_96:
(Start: 9 @40406 has 180 MA's), (29, 40508),

Gene: Pinkcreek_83 Start: 36360, Stop: 36515, Start Num: 9
Candidate Starts for Pinkcreek_83:
(Start: 9 @36360 has 180 MA's), (29, 36462),

Gene: Pio_96 Start: 41138, Stop: 41293, Start Num: 9
Candidate Starts for Pio_96:
(Start: 9 @41138 has 180 MA's), (29, 41240),

Gene: Pivoine_91 Start: 38410, Stop: 38565, Start Num: 9
Candidate Starts for Pivoine_91:
(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: Pleione_95 Start: 39404, Stop: 39559, Start Num: 9

Candidate Starts for Pleione_95:
(Start: 9 @39404 has 180 MA's), (29, 39506),

Gene: Primadonna_86 Start: 38296, Stop: 38451, Start Num: 9
Candidate Starts for Primadonna_86:
(Start: 9 @38296 has 180 MA's), (29, 38398),

Gene: Pupper_135 Start: 95110, Stop: 95283, Start Num: 6
Candidate Starts for Pupper_135:
(Start: 6 @95110 has 4 MA's), (19, 95185), (26, 95218),

Gene: PurduePete_92 Start: 39449, Stop: 39604, Start Num: 9
Candidate Starts for PurduePete_92:
(Start: 9 @39449 has 180 MA's), (29, 39551),

Gene: QBert_86 Start: 38905, Stop: 39060, Start Num: 9
Candidate Starts for QBert_86:
(Start: 9 @38905 has 180 MA's), (29, 39007),

Gene: Quasimodo_92 Start: 38940, Stop: 39095, Start Num: 9
Candidate Starts for Quasimodo_92:
(Start: 9 @38940 has 180 MA's), (29, 39042),

Gene: Rabinovish_89 Start: 39247, Stop: 39402, Start Num: 9
Candidate Starts for Rabinovish_89:
(Start: 9 @39247 has 180 MA's), (29, 39349),

Gene: Rahel_91 Start: 38767, Stop: 38922, Start Num: 9
Candidate Starts for Rahel_91:
(Start: 9 @38767 has 180 MA's), (29, 38869),

Gene: RedWattleHog_41 Start: 41152, Stop: 41310, Start Num: 9
Candidate Starts for RedWattleHog_41:
(Start: 9 @41152 has 180 MA's), (13, 41176), (17, 41206),

Gene: RoMag_87 Start: 38764, Stop: 38919, Start Num: 9
Candidate Starts for RoMag_87:
(Start: 9 @38764 has 180 MA's), (29, 38866),

Gene: Ronan_85 Start: 36211, Stop: 36366, Start Num: 9
Candidate Starts for Ronan_85:
(Start: 9 @36211 has 180 MA's), (29, 36313),

Gene: Roots515_91 Start: 38827, Stop: 38982, Start Num: 9
Candidate Starts for Roots515_91:
(Start: 9 @38827 has 180 MA's), (29, 38929),

Gene: SCentae_134 Start: 95261, Stop: 95434, Start Num: 6
Candidate Starts for SCentae_134:
(Start: 6 @95261 has 4 MA's), (19, 95336), (26, 95369),

Gene: SVoro_90 Start: 39399, Stop: 39554, Start Num: 9
Candidate Starts for SVoro_90:

(Start: 9 @39399 has 180 MA's), (29, 39501),

Gene: Salacia_96 Start: 39519, Stop: 39674, Start Num: 9

Candidate Starts for Salacia_96:

(Start: 9 @39519 has 180 MA's), (29, 39621),

Gene: Sauce_92 Start: 38259, Stop: 38414, Start Num: 9

Candidate Starts for Sauce_92:

(Start: 9 @38259 has 180 MA's), (29, 38361),

Gene: ScoobyDoobyDoo_86 Start: 38013, Stop: 38168, Start Num: 9

Candidate Starts for ScoobyDoobyDoo_86:

(4, 37983), (7, 38004), (Start: 9 @38013 has 180 MA's), (13, 38037), (28, 38112),

Gene: ScottMcG_89 Start: 38391, Stop: 38546, Start Num: 9

Candidate Starts for ScottMcG_89:

(Start: 9 @38391 has 180 MA's), (29, 38493),

Gene: Sebata_93 Start: 39895, Stop: 40050, Start Num: 9

Candidate Starts for Sebata_93:

(Start: 9 @39895 has 180 MA's), (18, 39952), (29, 39997),

Gene: Shaqnato_84 Start: 37134, Stop: 37289, Start Num: 9

Candidate Starts for Shaqnato_84:

(Start: 9 @37134 has 180 MA's), (29, 37236),

Gene: Shelob_94 Start: 40397, Stop: 40552, Start Num: 9

Candidate Starts for Shelob_94:

(Start: 9 @40397 has 180 MA's), (29, 40499),

Gene: ShiaLabeouf_92 Start: 39606, Stop: 39761, Start Num: 9

Candidate Starts for ShiaLabeouf_92:

(Start: 9 @39606 has 180 MA's), (29, 39708),

Gene: Shifa_81 Start: 36847, Stop: 37002, Start Num: 9

Candidate Starts for Shifa_81:

(Start: 9 @36847 has 180 MA's),

Gene: Shnickers_92 Start: 39166, Stop: 39321, Start Num: 9

Candidate Starts for Shnickers_92:

(Start: 9 @39166 has 180 MA's), (29, 39268),

Gene: Shrimp_92 Start: 39409, Stop: 39564, Start Num: 9

Candidate Starts for Shrimp_92:

(Start: 9 @39409 has 180 MA's), (29, 39511),

Gene: SilverDipper_93 Start: 38410, Stop: 38565, Start Num: 9

Candidate Starts for SilverDipper_93:

(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: Skog_197 Start: 125040, Stop: 125213, Start Num: 6

Candidate Starts for Skog_197:

(3, 125007), (Start: 6 @125040 has 4 MA's), (12, 125076), (26, 125148), (33, 125184),

Gene: SmallFry_92 Start: 38361, Stop: 38516, Start Num: 9
Candidate Starts for SmallFry_92:
(Start: 9 @38361 has 180 MA's), (29, 38463),

Gene: Spec_87 Start: 38931, Stop: 39086, Start Num: 9
Candidate Starts for Spec_87:
(Start: 9 @38931 has 180 MA's), (29, 39033),

Gene: Specks_98 Start: 41145, Stop: 41300, Start Num: 9
Candidate Starts for Specks_98:
(Start: 9 @41145 has 180 MA's), (29, 41247),

Gene: Sprinklers_87 Start: 37631, Stop: 37786, Start Num: 9
Candidate Starts for Sprinklers_87:
(Start: 9 @37631 has 180 MA's), (29, 37733),

Gene: Spud_92 Start: 39352, Stop: 39507, Start Num: 9
Candidate Starts for Spud_92:
(Start: 9 @39352 has 180 MA's), (29, 39454),

Gene: SrishMeg2525_91 Start: 38741, Stop: 38896, Start Num: 9
Candidate Starts for SrishMeg2525_91:
(Start: 9 @38741 has 180 MA's), (29, 38843),

Gene: StAugustine_46 Start: 43111, Stop: 43266, Start Num: 9
Candidate Starts for StAugustine_46:
(1, 42337), (2, 42943), (5, 43084), (Start: 9 @43111 has 180 MA's), (11, 43129), (34, 43243),

Gene: StephanieG_91 Start: 40221, Stop: 40376, Start Num: 9
Candidate Starts for StephanieG_91:
(Start: 9 @40221 has 180 MA's), (29, 40323),

Gene: Stormageddon_38 Start: 41135, Stop: 41293, Start Num: 9
Candidate Starts for Stormageddon_38:
(Start: 9 @41135 has 180 MA's), (13, 41159), (17, 41189),

Gene: Stubby_85 Start: 37438, Stop: 37593, Start Num: 9
Candidate Starts for Stubby_85:
(Start: 9 @37438 has 180 MA's), (29, 37540),

Gene: StubbySaigey_94 Start: 37698, Stop: 37853, Start Num: 9
Candidate Starts for StubbySaigey_94:
(Start: 9 @37698 has 180 MA's), (29, 37800),

Gene: Tainan_97 Start: 40795, Stop: 40950, Start Num: 9
Candidate Starts for Tainan_97:
(Start: 9 @40795 has 180 MA's), (29, 40897),

Gene: Teardrop_92 Start: 38469, Stop: 38624, Start Num: 9
Candidate Starts for Teardrop_92:
(Start: 9 @38469 has 180 MA's), (29, 38571),

Gene: TinyTim_92 Start: 39405, Stop: 39560, Start Num: 9
Candidate Starts for TinyTim_92:
(Start: 9 @39405 has 180 MA's), (29, 39507),

Gene: Tonenili_106 Start: 43411, Stop: 43566, Start Num: 9
Candidate Starts for Tonenili_106:
(Start: 9 @43411 has 180 MA's), (27, 43507), (29, 43513), (32, 43528),

Gene: Tortoise16_90 Start: 39263, Stop: 39418, Start Num: 9
Candidate Starts for Tortoise16_90:
(Start: 9 @39263 has 180 MA's), (29, 39365),

Gene: Trinitium_88 Start: 37437, Stop: 37592, Start Num: 9
Candidate Starts for Trinitium_88:
(Start: 9 @37437 has 180 MA's), (29, 37539),

Gene: Turret_87 Start: 37103, Stop: 37258, Start Num: 9
Candidate Starts for Turret_87:
(Start: 9 @37103 has 180 MA's), (29, 37205),

Gene: Tyke_94 Start: 40971, Stop: 41126, Start Num: 9
Candidate Starts for Tyke_94:
(Start: 9 @40971 has 180 MA's), (29, 41073),

Gene: ValleyTerrace_92 Start: 38410, Stop: 38565, Start Num: 9
Candidate Starts for ValleyTerrace_92:
(Start: 9 @38410 has 180 MA's), (29, 38512),

Gene: Wally_91 Start: 37960, Stop: 38115, Start Num: 9
Candidate Starts for Wally_91:
(Start: 9 @37960 has 180 MA's), (29, 38062),

Gene: Willis_93 Start: 39300, Stop: 39455, Start Num: 9
Candidate Starts for Willis_93:
(Start: 9 @39300 has 180 MA's), (29, 39402),

Gene: Yassified_88 Start: 37670, Stop: 37825, Start Num: 9
Candidate Starts for Yassified_88:
(Start: 9 @37670 has 180 MA's), (29, 37772),

Gene: YemiJoy2021_93 Start: 39402, Stop: 39557, Start Num: 9
Candidate Starts for YemiJoy2021_93:
(Start: 9 @39402 has 180 MA's), (29, 39504),

Gene: YoungMoneyMata_92 Start: 38161, Stop: 38316, Start Num: 9
Candidate Starts for YoungMoneyMata_92:
(Start: 9 @38161 has 180 MA's), (29, 38263),

Gene: Yucca_92 Start: 39324, Stop: 39479, Start Num: 9
Candidate Starts for Yucca_92:
(Start: 9 @39324 has 180 MA's), (29, 39426),

Gene: Zalkecks_93 Start: 39090, Stop: 39245, Start Num: 9

Candidate Starts for Zalkecks_93:
(Start: 9 @39090 has 180 MA's), (29, 39192),

Gene: Zeenon_94 Start: 39017, Stop: 39172, Start Num: 9
Candidate Starts for Zeenon_94:
(Start: 9 @39017 has 180 MA's), (29, 39119),

Gene: ZygoTaiga_91 Start: 39406, Stop: 39561, Start Num: 9
Candidate Starts for ZygoTaiga_91:
(Start: 9 @39406 has 180 MA's), (29, 39508),